MM 97-77

LAW OFFICES

DONALD E. MARTIN, P.C.

2000 L STREET, N.W., SUITE 200
WASHINGTON, D. C. 20036

DONALD E. MARTIN
ADMITTED IN VIRGINIA ONLY

OF COUNSEL
CAROL R. WHITEHORN
ADMITTED IN D.C. AND COLORADO
BARBARA MERLIE
ADMITTED IN D.C. AND PENNSYLVANIA

TELEPHONE
(202) 887-5070

TELECOPIER
(202) 833-3843

July 23, 1993

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

RE: Major Change Application
WGTS-FM
Takoma Park, Maryland

Dear Ms. Searcy:

On behalf of Columbia Union College Broadcasting, Inc., I am submitting herewith an application on FCC Form 340 for authority to modify the facilities of WGTS-FM, Takoma Park, Maryland.

The applicant is a nonprofit entity and WGTS-FM is a noncommercial station operating on an FM channel reserved for noncommercial use. This application is therefore exempt from the filing fee requirements of Section 1.1104 of the Commission's rules.

The applicant is providing concurrent notification of the filing of this application to an affected Channel 6 television station, WTVR-TV, Richmond, Virginia, pursuant to Section 73.525(b)(4) of the Commission's rules.

Please contact the undersigned should there be any questions concerning this matter.

Very truly yours,

Donald E Martin

Donald E. Martin
Counsel for
Columbia Union College Broadcasting, Inc.

PAS
8-3

Federal Communications Commission
Washington, D. C. 20554

MM 97-77

FCC 340

Approved by OMB
3060-0034
Expires 11/30/94
See Page 23 for information regarding public burden estimate

APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION

(Carefully read instructions before filing form) Return only form to FCC

RECEIVED
JUL 23 1993
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

For Commission Use Only
File No. BPED-930723MB

Section I - GENERAL INFORMATION

1. Name of Applicant		
Columbia Union College Broadcasting, Inc.		
Street Address or P.O. Box		
7600 Flower Avenue		
City	State	ZIP Code
Takoma Park	MD	20912
Telephone No. (Include Area Code)		
301-891-4200		

Send notices and communications to the following person at the address below:		
Name		
Donald Wheeler ** Radio Station WGTS-FM		
Street Address or P.O. Box		
7600 Flower Avenue		
City	State	ZIP Code
Takoma Park	MD	20912
Telephone No. (Include Area Code)		
301-891-4200		

2. This application is for: ☐ AM ☒ FM ☐ TV

(a) Channel No. or Frequency	(b) Principal Community	City	State
91.9 MHZ		Takoma Park	MD

(c) Check one of the following boxes:

☐ Application for **NEW** station

☒ **MAJOR** change in licensed facilities; call sign: WGTS-FM

☐ **MINOR** change in licensed facilities; call sign: _____

☐ **MAJOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

☐ **MINOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

☐ **AMENDMENT** to pending application; application file number: _____

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application? ☐ Yes ☒ No

91.9MHZ
BPED -930723MB WGTS-FM
TAKOMA PARK MD
COLUMBIA UNION COLLEGE B/CING., IN

Community of License	
City	State

** with cc to: Donald E. Martin, Esq.
2000 L Street, N.W., Suite 200
Washington, D.C. 20036

MLJ MOFFET, LARSON & JOHNSON, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS

Two Skyline Place
Suite 800

5203 Leesburg Pike
Falls Church, Virginia 22041

ORIGINAL

ENGINEERING REPORT

ENGINEERING EXHIBIT

SUPPORTING THE APPLICATION

OF

COLUMBIA UNION COLLEGE BROADCASTING, INC.

TO MOVE AND CHANGE THE FACILITIES

OF

WGTS-FM

AT

TAKOMA PARK, MARYLAND

Channel : 220B
ERP : 25.0 kW (omnidirectional)
HAAT : 150 meters

June 8, 1993

MLJ MOFFET, LARSON & JOHNSON, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS

Two Skyline Place
Suite 800

5203 Leesburg Pike
Falls Church, Virginia 22041

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

ENGINEERING STATEMENT

This Engineering Exhibit was prepared on behalf of Columbia Union College Broadcasting, Inc., licensee of noncommerical FM station WGTS-FM, serving Takoma Park, Maryland.

WGTS-FM is licensed to operate on Channel 220B with effective radiated power (ERP) of 29.5 kilowatts, horizontal and vertical, and antenna height of 48 meters above average terrain.

The purpose of this exhibit is to supply information in support of a construction permit to move and change the facilities of WGTS-FM. The proposed operation will be located on the existing WAVA(FM) tower. The proposed operation will remain on Channel 220 as a Class B facility. The proposed antenna system will employed an omnidirectional antenna which produces a maximum ERP of 25.0 kW at 150 meters HAAT.

The exhibits referred to on Section V-B are attached as follows:

Exhibit 1	: Antenna Sketch
Exhibit 2	: Other Stations within Transmit Area
Exhibit 3	: Site Map
Exhibit 4	: Proposed Coverage Map
Exhibit 5	: Present & Proposed 1.0 mV/m contour Map
Exhibit 6-A - 6-C	: Allocation Study
Exhibit 7-A - 7-B	: Short spacing to commercial station WERQ(FM)
Exhibit 8-A - 8-B	: TV Channel 6
Exhibit 9-A - 9-B	: Environment Statement
Table 1-A	: FM Stations within 10 kilometers
Table 1-B	: TV Stations within 10 kilometers
Table 2	: Intermodulation Study
Table 3	: Proposed Channel study of 220B
Table 4	: Distance to proposed coverage & interference contours
Table 5	: Present Channel study of 220B
Table 6	: TV Channel 6 stations within 154 kilometers

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Columbia Union College Broadcasting, Inc.

Call letters *(if issued)*	Is this application being filed in response to a window? ☐ Yes ☒ No
WGTS-FM	If Yes, specify closing date: _____

Purpose of Application: *(check appropriate boxes)*

- ☐ Construct a new (main) facility
- ☐ Construct a new auxiliary facility
- ☐ Modify existing construction permit for main facility
- ☐ Modify existing construction permit for auxiliary facility
- ☒ Modify licensed main facility
- ☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- ☒ Antenna supporting-structure height
- ☒ Effective radiated power
- ☒ Antenna height above average terrain
- ☐ Frequency
- ☒ Antenna location
- ☐ Class
- ☐ Main Studio location
- ☐ Other *(Summarize briefly)*

File Number(s) BLED - 717

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
220	Takoma Park	Montgomery	MD

Class *(check only one box below)*

☐ A ☐ B1 ☒ B ☐ C

☐ C2 ☐ C1 ☐ C ☐ D

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

5232 Lee Highway, Arlington (Arlington County), Virginia

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	°	'	"	Longitude	°	'	"
	38	53	44		77	08	04

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☒ Yes ☐ No

If Yes, give call letter(s) or file number(s) or both. WABS (AM), WAVA (FM) & WJZE (FM)

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

N/A

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☐ Yes ☒ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available. Exhibit No.

Date _____ Office where filed _____

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Pentagon Heliport	7.1	112°
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 119 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 121 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 240 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 98 meters (H)

98 meters (V)

(2) above mean sea level [(aX1) + (bX1)] 217 meters (H)

217 meters (V)

(3) above average terrain 150 meters (H)

150 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(bX3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator. Exhibit No. 1

9. Effective Radiated Power:
(a) ERP in the horizontal plane 25.0 kw (H*) 25.0 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field. Exhibit No.

_____ kw (H*) _____ kw (V*)

*Polarization

10. Is a directional antenna proposed? ☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field. Exhibit No.

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour? ☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No.

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? ☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)* Exhibit No. 2

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers. Exhibit No. 3

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers: Exhibit No. 4

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 6,990 sq. km. Population 3,807,825

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours. Exhibit No. 5

Enter the following from Exhibit above: Gain Area 2,398 sq. mi.
Loss Area 31 sq. mi.

Percent change (gain area plus loss area as percentage of present area) 81 %.
If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.: _____)

18. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313).*

Source of terrain data: *(check only one box below)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: NGDC – TPG-0050)

[ ] Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances to the 1 mV/m contour (kilometers)
0	143	45.1
45	137	44.3
90	198	50.9
135	193	50.5
180	162	47.5
225	131	43.5
270	100	39.1
315	137	44.3

Allocation Studies

(See Subpart C of 47 C.F.R. Part 73)

19. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico? [ ] Yes [X] No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

Exhibit No.

20. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada? ☐ Yes ☒ No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947. Exhibit No.

21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the lack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following: Exhibit No. 6

(a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
(b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
(c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
(d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
(e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
(f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
(g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(h) The name of the map(s) used in the Exhibit(s).

22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ *(separation requirements involving intermediate frequency (i.f.) interference).* Exhibit No. Table 3

23.(a) Is the proposed operation on Channel 218, 219, or 220? ☒ Yes ☐ No

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207? ☐ Yes ☒ No

(c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223. Exhibit No.

(d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No. 7

1/ A showing that the proposed operation meets the minimum distance separation requirements. Include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.

(1) Protected and interfering contours, in all directions (360), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

24. Is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525?

[X] Yes [ ] No

If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station.

Exhibit No. 8

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)?

[ ] Yes [X] No

If Yes, attach as an Exhibit information required in 1/. *(Except for Class D (secondary) proposals.)*

Exhibit No.

26. Environmental Statement *(See 47 C.F.R. Section 1.1307 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact?

[ ] Yes [X] No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

Exhibit No.

If No, explain briefly why not.

See Exhibit 9

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
William A. Hamman	Consulting Engineer
Signature	Address *(Include ZIP Code)*
	Moffet, Larson & Johnson, Inc 5203 Leesburg Pike, Suite 800 Falls Church, VA 22041
Date	Telephone No. *(Include Area Code)*
June 8, 1993	(703) 824-5660

NOTE: NOT DRAWN TO SCALE

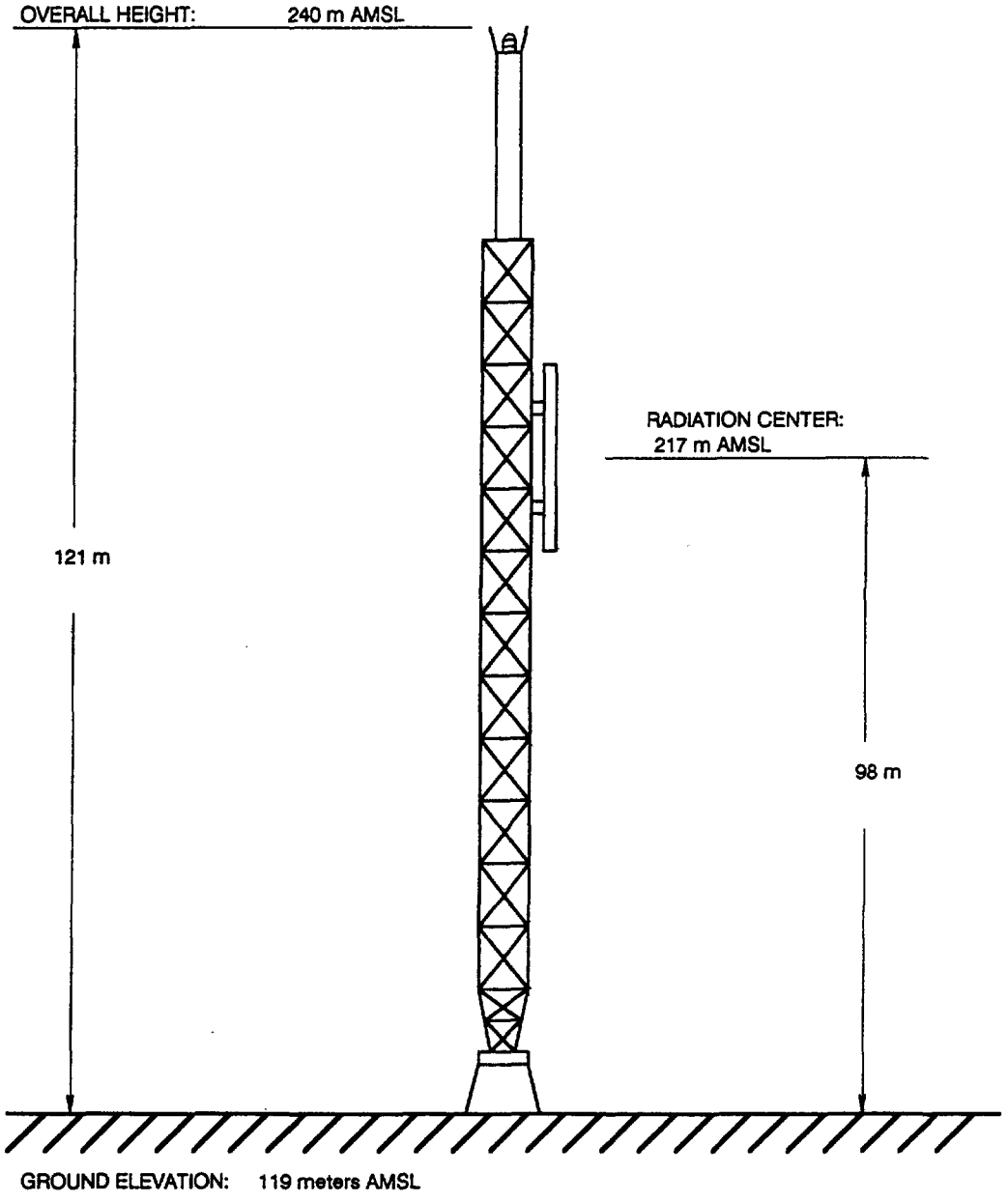


EXHIBIT NO. 1

WGTS-FM TAKOMA PARK, MARYLAND

VERTICAL PLAN SKETCH OF PROPOSED ANTENNA AND SUPPORT STRUCTURE

JUNE, 1993 MOFFET, LARSON & JOHNSON, INC.

MLJ MOFFET, LARSON & JOHNSON, INC.
CONSULTING TELECOMMUNICATIONS ENGINEERS

Two Skyline Place
Suite 800

5203 Leesburg Pike
Falls Church, Virginia 22041

ENGINEERING REPORT

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

EXHIBIT 2

FURTHER RESPONSE TO PART 12 OF FCC FORM 340

No known nonbroadcast radio stations are within 60 meters of the proposed antenna. The existing operations of WABS(AM), WAVA(FM) and the authorized facility of WJZE(FM) will be located within 60 meters of the proposed antenna. It is not expected that the proposed WGTS-FM operation will cause any adverse affect to the FM or AM facilities. However, if any adverse affects should occur, the applicant will alleviate the problem.

A study was performed to determine the possibility that the proposed emission would cause receiver-induced intermodulation interference (RITOIE) when mixed with the signals of other stations (see Table 2). Parameters used were a Maximum Harmonic Coefficient of 1 for form (nA + nB + nC...), a Maximum Order of Product Allowance of 3, and a Maximum Harmonic Coefficient of 2 for form (nA - (n-1)B). A maximum of 3 frequencies were allowed to enter the Product.

Tables 1-A and 1-B list all known FM and TV stations within 10 kilometers of the proposed site. A total of 25 Transmit Frequencies were studied, including 16 FM stations, and 4 VHF TV stations (aural and visual) in addition to the proposed facility.

The results in Table 2 show the receiver-induced products which may have the potential to cause interference. Receiver induced intermodulation is not expected to result from the proposed transmit facility and the stations listed on Table 2.

The applicant accepts full responsibility, as specified in 47 C.F.R. 73.318, for the elimination of any objectionable blanketing interference or receiver-induced third order intermodulation interference.

Moffet, Larson & Johnson, Inc.

Table 1-A
Date: 6/93

Study Name : WGTS-FM - TAKOMA PARK, MD
FM Stations within : 10 km
Coordinates : N 38 53 44.0 W 77 8 4.0

Call	Location	Status		Chan	File Number		ERP	HAAT	Zn	Latitude	Longitude	Bear	Dist	Owner/Applicant
WAMU	WASHINGTON, DC	LIC	c	*203B	BLED	920805KC	50.0	500	1	38 56 9.0	77 5 33.0	39.00	5.76	THE AMERICAN UNIVE
WPFW	WASHINGTON, DC	LIC		*207B	BLED	1662	50.0	410	1	38 56 9.0	77 5 33.0	39.00	5.76	PACIFICA FOUNDATIO
WETAFM	WASHINGTON, DC	LIC	c	*215B	BLED	850819KH	75.0	616	1	38 53 30.0	77 7 55.0	153.42	0.48	THE GREATER WASHIN
WKYS	WASHINGTON, DC	LIC	c	230B	BLH	900130KB	24.0	705	1	38 56 24.0	77 4 54.0	42.72	6.73	WKYS-FM, INC.
WLTT	BETHESDA, MD	LIC		234B	BLH	831013AA	22.4	744	1	38 57 49.0	77 6 18.0	18.59	7.97	CBS INC.
WLTT	BETHESDA, MD	CP		234B	BPH	920124IG	20.5	771	1	38 57 49.0	77 6 18.0	18.59	7.97	CBS INC.
WHURFM	WASHINGTON, DC	LIC		242B	BLH	5867	24.0	670	1	38 57 1.0	77 4 47.0	37.87	7.71	THE HOWARD UNIVERS
WASH	WASHINGTON, DC	LIC		246B	BLH	5847	22.5	690	1	38 57 21.0	77 4 57.0	33.82	8.07	WASHINGTON LICENSE
WASH	WASHINGTON, DC	CP		246B	BPH	860930IB	26.0	686	1	38 57 21.0	77 4 57.0	33.82	8.07	WASHINGTON LICENSE
WMZQFM	WASHINGTON, DC	LIC		254B	BLH	6423	50.0	490	1	38 53 12.0	77 12 5.0	260.34	5.89	WMZQ, INC
WGAYFM	WASHINGTON, DC	LIC		258B	BLH	7750	21.0	770	1	38 57 49.0	77 6 18.0	18.59	7.97	GREATER MEDIA, INC
WGAYFM	WASHINGTON, DC	CP	c	258B	BPH	901211IF	21.0	751	1	38 57 49.0	77 6 18.0	18.59	7.97	GREATER MEDIA, INC
WJZE	WASHINGTON, DC	CPM	c	262B	BMPH	921223IF	36.0	574	1	38 53 44.0	77 8 4.0	0.00	0.00	RADIO 100 OF MARYL
WMMJ	BETHESDA, MD	LIC	c	272A	BLH	910830KA	2.89	479	1	38 56 9.0	77 5 33.0	39.00	5.76	RADIO I OF WASHING
WGMSFM	WASHINGTON, DC	LIC	c	278B	BLH	910614KA	44.0	518	1	38 56 9.0	77 5 33.0	39.00	5.76	CLASSICAL ACQUISIT
WAVA	ARLINGTON, VA	LIC	c	286B	BLH	891103KB	41.0	541	1	38 53 44.0	77 8 4.0	0.00	0.00	BELTWAY MEDIA PART
WCXRFM	WOODBRIDGE, VA	LIC		290B	BLH	851021KC	28.0	648	1	38 52 28.0	77 13 24.0	253.06	8.06	LEGACY BCSTG, INC
WJFK	MANASSAS, VA	LIC		294B	BLH	840329AA	22.4	730	1	38 52 28.0	77 13 24.0	253.06	8.06	INFINITY BCSTG OF
WJFK	MANASSAS, VA	CP	c	294B	BPH	9008221A	22.0	745	1	38 52 28.0	77 13 24.0	253.06	8.06	INFINITY BCSTG OF
WRQX	WASHINGTON, DC	LIC	c	297B	BLH	910826KB	34.0	602	1	38 57 1.0	77 4 47.0	37.87	7.71	WMAL, INC.

Moffet, Larson & Johnson, Inc.

Table 1-B
Date: 6/93

Study Name : WGTS-FM - TAKOMA PARK, MD
TV Stations within : 10 km
Coordinates : N 38 53 44.0 W 77 8 4.0

Call	Location	Status	Chan	File Number	ERP	HAAT	Zn	Latitude	Longitude	Bear	Dist	Owner/Applicant
WRCTV	WASHINGTON, DC	LIC	4-	BLCT 891122KM	100.	570	1	38 56 24.0	77 4 54.0	42.72	6.73	NBC SUBSIDIARY INC
NEW	WASHINGTON, DC	APP	4-	BPCT 910903KF	100.	702	1	38 52 28.0	77 13 24.0	253.06	8.06	NATIONAL CAPITAL C
WTTG	WASHINGTON, DC	LIC	5-	BLCT 1308	100.	770	1	38 57 21.0	77 4 57.0	33.82	8.07	METROMEDIA RADIO A
WJLATV	WASHINGTON, DC	LIC	7+	BLCT 2199	316.	770	1	38 57 1.0	77 4 47.0	37.87	7.71	ALLBRITTON COMMUNI
WUSA	WASHINGTON, DC	LIC	9z	BLCT 2207	316.	770	1	38 57 1.0	77 4 47.0	37.87	7.71	THE EVENING NEWS A
NEW	WASHINGTON, DC	APPG c	14-	BPCT 800118KP	2422.	745	1	38 58 35.0	77 6 53.0	10.74	9.13	WSCT-TV INC
W14AA	ARLINGTON, VA	LIC c	14	BLTT 1852	0.74		4	38 53 44.0	77 8 4.0	0.00	0.00	LOS CEREZOS TELEVI
WTMW	ARLINGTON, VA	CPM c	14-	BMPCT 910730KE	2880.	568	1	38 56 24.0	77 4 54.0	42.72	6.73	URBAN BCSTG CORP
WDCA	WASHINGTON, DC	LIC	20+	BLCT 2091	3980.	770	1	38 57 49.4	77 6 18.2	18.53	7.98	TAFT TV AND RADIO
WETATV	WASHINGTON, DC	LIC	*26-	BLET 438	1620.	770	1	38 57 49.4	77 6 18.2	18.53	7.98	GREATER WASH ED TE
WETATV	WASHINGTON, DC	CP c	*26-	BPET 890111KE	2296.	766	1	38 57 49.0	77 6 18.0	18.59	7.97	GREATER WASH ED TE
WHMM	WASHINGTON, DC	LIC	*32+	BLET 801107KE	4989.	700	1	38 57 49.0	77 6 18.0	18.59	7.97	HOWARD UNIVERSITY
NEW-T	WASHINGTON, DC	APP	39	BPTTL 820921QN	3.53		4	38 56 24.0	77 4 54.0	42.72	6.73	NATIONAL BROADCAST
NEW-T	FALLS CHURCH, VA	APP	40	BPTTL 810119IF	9.19		4	38 52 56.0	77 10 19.0	245.46	3.57	THE FLEAPOWER TELE
W42AJ	WASHINGTON, DC	LIC c	42	BLTTL 901029JO	15.5		4	38 56 9.0	77 4 26.0	49.46	6.90	COMMUNICASTING COR
W48AW	WASHINGTON, DC	LIC c	48	BLTTL 910617IG	35.0		4	38 56 9.0	77 5 33.0	39.00	5.76	LOS CEREZOS TELEVI
NEW-T	WASHINGTON, DC	APP	56	BPTT 790410IA	1.00		4	38 56 9.0	77 5 33.0	39.00	5.76	
WNVC	FAIRFAX, VA	LIC	*56-	BLET 830525KF	1230.	730	1	38 52 28.0	77 13 24.0	253.06	8.06	CENTRAL VA ETV COR
WNVC	FAIRFAX, VA	CP	*56-	BPET 901116KE	1259.	705	1	38 52 28.0	77 13 24.0	253.06	8.06	CENTRAL VA ETV COR
NEW	WASHINGTON, DC	CP	58z	BPEX 860711KJ	1.50	375	1	38 57 1.0	77 4 47.0	37.87	7.71	NATIONAL ASSOCIATI
NEW	WASHINGTON, DC	CP	59	BPEX 880916KF	1.50	375	1	38 57 1.0	77 4 47.0	37.87	7.71	ADVANCED TV TEST C
NEW-T	WASHINGTON, DC	APP c	62	BPEX 800204IJ	1.00		4	38 56 9.0	77 5 33.0	39.00	5.76	HLD & M COMMUNICAT

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

TABLE 2 (PAGE 1 OF 3)

INTERMODULATION STUDY

```
INTERMOD        Rev :  2.00
Date:  6- 8-93  Time: 17:44:58

Project: WGTS INTERMOD STUDY

Maximum Harmonic Coefficient for Form (nA + nB + nC... ) =   1
Maximum Order of Product Allowed                          =   3
Maximum Frequencies Allowed to Enter Product              =   3
Maximum Harmonic Coefficient for Form (nA - (n-1)B)       =   2


Transmit Frequencies (MHz)
 1 -   67.2500     2 -   71.2500     3 -   77.2500     4 -   81.7500
 5 -   88.5000     6 -   89.3000     7 -   90.9000     8 -   91.9000
 9 -   93.9000    10 -   94.7000    11 -   96.3000    12 -   97.1000
13 -   98.7000    14 -   99.5000    15 -  100.3000    16 -  102.3000
17 -  103.5000    18 -  105.1000    19 -  105.9000    20 -  106.7000
21 -  107.3000    22 -  175.2500    23 -  179.7500    24 -  187.2500
25 -  191.7500

Receive Frequencies (MHz)

    92.9000       103.0000

Receive Frequency   92.9000 MHz  Bandwidth 10.1000 MHz

Intermodulation Products within   87.8500 to   97.9500 MHz

Receive Frequency  103.0000 MHz  Bandwidth 10.1000 MHz

Intermodulation Products within   97.9500 to  108.0500 MHz
```

Transmit Frequency Multiples																									Product	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	(MHz)	Call Sign
.	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	107.9000	WFSI(FM)
.	.	.	.	.	.	.	-1	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	107.9000	
.	.	.	.	.	.	.	-1	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	107.9000	
.	.	.	.	.	.	.	-1	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	107.9000	
.	.	.	.	.	-1	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	107.7000	WRCY(FM)
.	.	.	.	.	.	-1	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	107.7000	
.	.	.	-1	.	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	107.2500	WRQX(FM)
.	.	.	.	.	.	.	-1	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	106.7000	WJFK(FM)
.	.	-1	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	106.5500	WWMX(FM)
.	.	.	-1	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	106.4500	
.	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	106.3000	W292AD
.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	106.3000	
.	.	.	.	.	.	.	-1	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	106.3000	
.	.	.	.	-1	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	105.7000	WQSR(FM)
.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	105.7000	
.	.	-1	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	105.5500	W288AB
.	.	.	.	.	.	.	-1	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	105.5000	
.	.	.	.	.	.	.	-1	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	105.5000	
.	.	.	.	.	.	.	-1	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	105.5000	
.	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	105.1000	WAVA(FM)
.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	104.1000	WXTR-FM


WGTS-FM
TAKOMA PARK, MARYLAND
MAP SHOWING PROPOSED SITE
JUNE 1993
MLJ
Moffet, Larson & Johnson, Inc.
Consulting Telecommunications Engineers
Exhibit No. 3
PROPOSED SITE
FALLS CHURCH QUADRANGLE
VIRGINIA – MARYLAND
7.5 MINUTE SERIES (TOPOGRAPHIC)

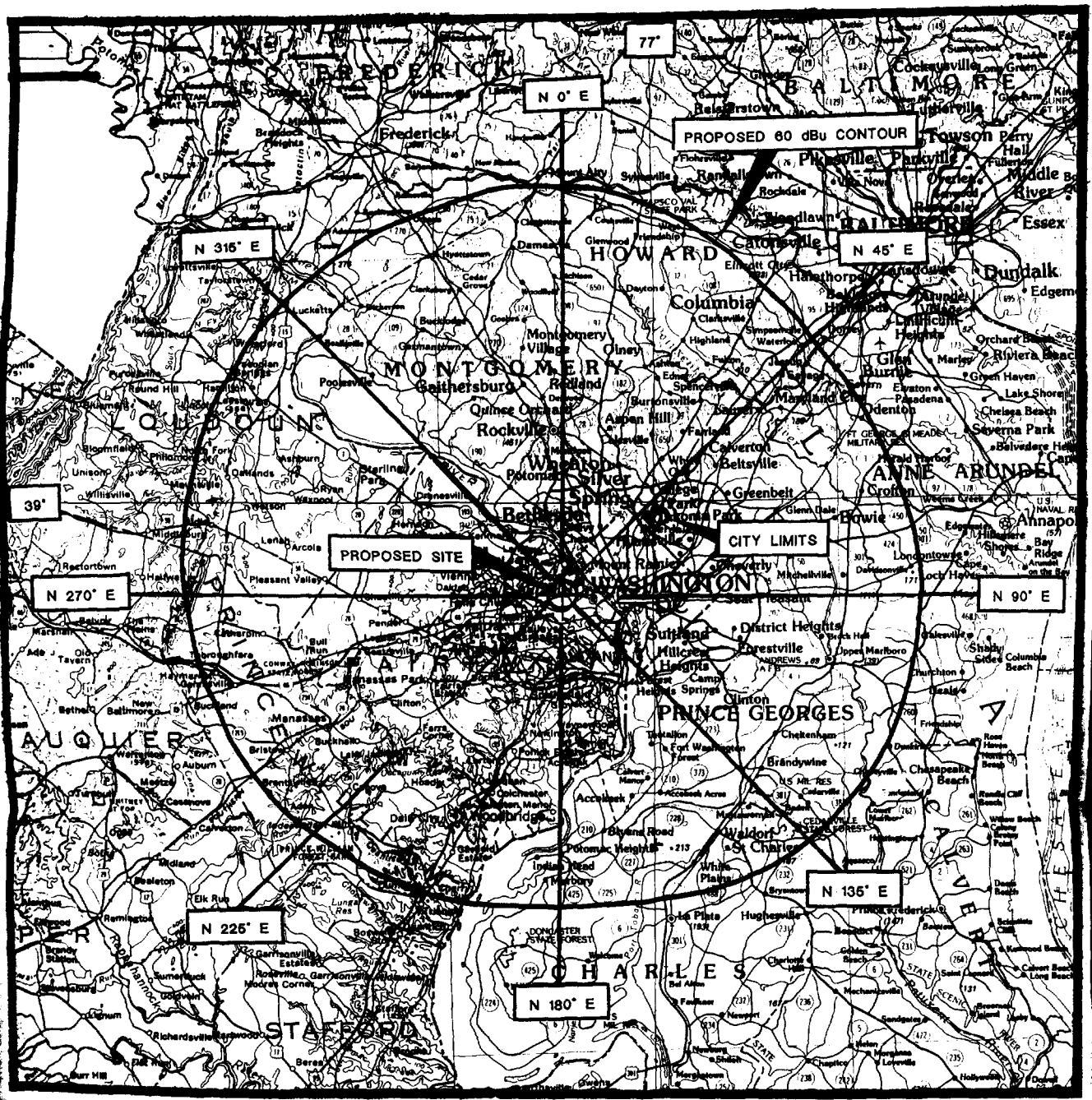


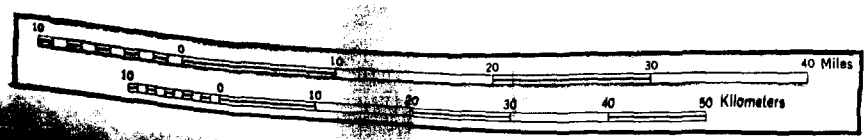
Exhibit No. 4

WGTS-FM TAKOMA PARK, MARYLAND

MAP SHOWING THE PROPOSED COVERAGE CONTOUR

JUNE 1993

MLJ Moffet, Larson & Johnson, Inc. Consulting Telecommunications Engineers




77°
39°
38°
PRESENT SITE
PROPOSED SITE
PRESENT 60 dBu CONTOUR
PROPOSED 60 dBu CONTOUR
Exhibit No. 5
WGTS-FM
TAKOMA PARK, MARYLAND
MAP SHOWING PRESENT AND PROPOSED 60 dBu CONTOURS
JUNE 1993
MLJ Moffet, Larson & Johnson, Inc.
Consulting Telecommunications Engineers
40 Miles
50 Kilometers

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

TABLE 2 (PAGE 2 OF 3)

INTERMODULATION STUDY

Transmit Frequency Multiples																							Product	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	(MHz)	Call Sign
.	.	.	.	.	1	.	-1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	104.1000	WXTR-FM
.	.	.	-1	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	104.0500	
.	.	.	.	1	.	.	-1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	103.9000	WZYQ(FM)
.	.	.	.	.	.	.	-1	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	103.9000	
.	.	.	.	.	.	.	-1	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	103.9000	
.	.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	103.9000	
.	.	.	.	.	.	.	1	.	-1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	103.9000	
.	.	-1	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	103.1500	WAFY(FM)
.	.	.	.	.	.	.	-1	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	103.1000	
.	.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	103.1000	
.	.	.	.	.	.	.	1	.	-1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	103.1000	
.	.	.	.	.	.	.	-1	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	103.1000	
.	.	.	.	-1	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	102.9000	RM-5457
.	.	.	.	.	-1	.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	102.9000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	102.9000	
.	.	.	.	.	.	.	-1	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	102.3000	WMMJ(FM)
.	.	.	.	.	.	.	-1	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	102.3000	
.	.	.	.	.	.	.	1	.	-1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	102.3000	
.	.	.	.	.	.	.	-1	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	102.3000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	102.3000	
.	.	.	.	.	.	.	-1	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	101.5000	WBQB(FM)
.	.	.	.	.	.	.	1	-1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	101.5000	
.	.	.	.	.	.	.	-1	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	101.5000	
.	.	.	.	.	.	.	-1	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	101.5000	
.	.	.	.	.	.	.	1	.	.	.	-1	.	.	.	.	.	.	.	1	.	.	.	.	.	101.5000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	101.5000	
.	.	.	-1	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	101.0500	WWDC-FM
.	.	.	.	.	.	.	1	-1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	100.3000	WJZE(FM)
.	.	.	.	1	.	.	-1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	100.1000	W261CD
.	.	.	.	.	.	.	1	.	.	.	-1	.	.	.	.	.	1	.	.	.	.	.	.	.	99.9000	WFRE(FM)
.	.	.	.	.	.	.	-1	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	99.9000	
.	.	.	.	.	.	.	1	.	.	.	.	-1	.	.	.	.	.	.	1	.	.	.	.	.	99.9000	
.	.	.	.	.	.	.	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	99.8500	
.	.	.	.	.	.	.	1	.	-1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	99.5000	WGAY-FM
.	.	.	-1	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	99.4500	
.	.	.	.	.	.	.	-1	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	99.1000	WHFS(FM)
.	.	.	.	.	.	.	-1	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	99.1000	
.	.	.	.	.	.	.	1	.	.	.	.	.	-1	.	.	.	.	.	1	.	.	.	.	.	99.1000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	99.1000	
.	.	.	.	.	.	.	1	.	.	.	.	-1	.	.	.	.	.	1	.	.	.	.	.	.	99.1000	
.	.	.	-1	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	98.6500	WMZQ-FM
.	.	.	.	.	.	.	-1	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	98.3000	WSMD(FM)
.	.	.	.	.	.	.	1	.	.	.	.	-1	.	.	.	.	1	.	.	.	.	.	.	.	98.3000	
.	.	.	.	.	.	.	1	.	.	.	-1	.	.	.	.	1	.	.	.	.	.	.	.	.	98.3000	
.	.	.	.	.	.	.	1	.	.	.	.	.	-1	.	.	.	.	1	.	.	.	.	.	.	98.3000	
.	.	.	.	.	.	.	1	.	.	.	.	.	.	-1	.	.	.	.	1	.	.	.	.	.	98.3000	
.	.	.	.	.	.	.	1	-1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	98.3000	
.	-1	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	97.9000	WIYY(FM)
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	97.9000	
.	.	.	1	.	.	.	-1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	97.1500	WASH(FM)
.	.	.	.	.	.	.	1	.	.	.	-1	.	.	.	1	.	.	.	.	.	.	.	.	.	97.1000	
.	.	.	.	.	.	.	1	-1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	96.7000	WBYQ,WHPS
.	.	.	.	.	.	.	1	.	.	.	.	.	.	-1	.	.	1	.	.	.	.	.	.	.	96.7000	

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

TABLE 2 (PAGE 3 OF 3)

INTERMODULATION STUDY

Transmit Frequency Multiples																									Product	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	(MHz)	Call Sign
.	.	.	.	.	.	.	1	.	.	.	.	-1	.	.	.	1	.	.	.	.	.	.	.	.	96.7000	WBYQ,WHPS
.	.	.	.	.	.	.	-1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	96.7000	
.	.	.	.	.	.	.	1	.	-1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	96.7000	
.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	-1	.	.	.	1	.	.	.	.	.	96.3000	WHUR-FM
.	.	.	.	.	.	.	-1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	95.9000	WWIN,WGRO,
-1	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	95.9000	W240AC
.	.	.	.	.	.	.	1	.	.	.	.	.	-1	.	.	1	.	.	.	.	.	.	.	.	95.9000	
.	.	.	.	.	.	.	1	.	-1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	95.9000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	95.9000	
.	.	.	.	.	.	.	1	.	.	.	.	-1	.	.	1	.	.	.	.	.	.	.	.	.	95.5000	WPGC-FM
.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	-1	.	.	1	.	.	.	.	.	.	95.5000	
.	.	.	.	.	.	.	1	-1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	95.1000	WRBS(FM)
.	.	.	.	.	.	.	1	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	.	.	95.1000	
.	.	.	.	.	.	.	1	.	.	-1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	95.1000	
.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	-1	.	.	1	.	.	.	.	.	95.1000	
.	.	.	.	.	.	.	1	.	.	.	-1	.	.	1	.	.	.	.	.	.	.	.	.	.	95.1000	
.	.	.	.	.	.	.	1	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	.	.	.	94.7000	WLTT(FM)
.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	.	94.7000	
.	.	.	.	-1	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	94.3000	WQRA(FM)
.	.	.	.	.	.	.	1	-1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	94.3000	
.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	-1	.	1	.	.	.	.	.	.	94.3000	
.	.	.	.	.	.	.	1	.	-1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	94.3000	
.	.	.	.	.	.	.	1	.	.	.	-1	.	1	.	.	.	.	.	.	.	.	.	.	.	94.3000	
.	.	.	.	.	.	.	1	.	.	-1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	94.3000	
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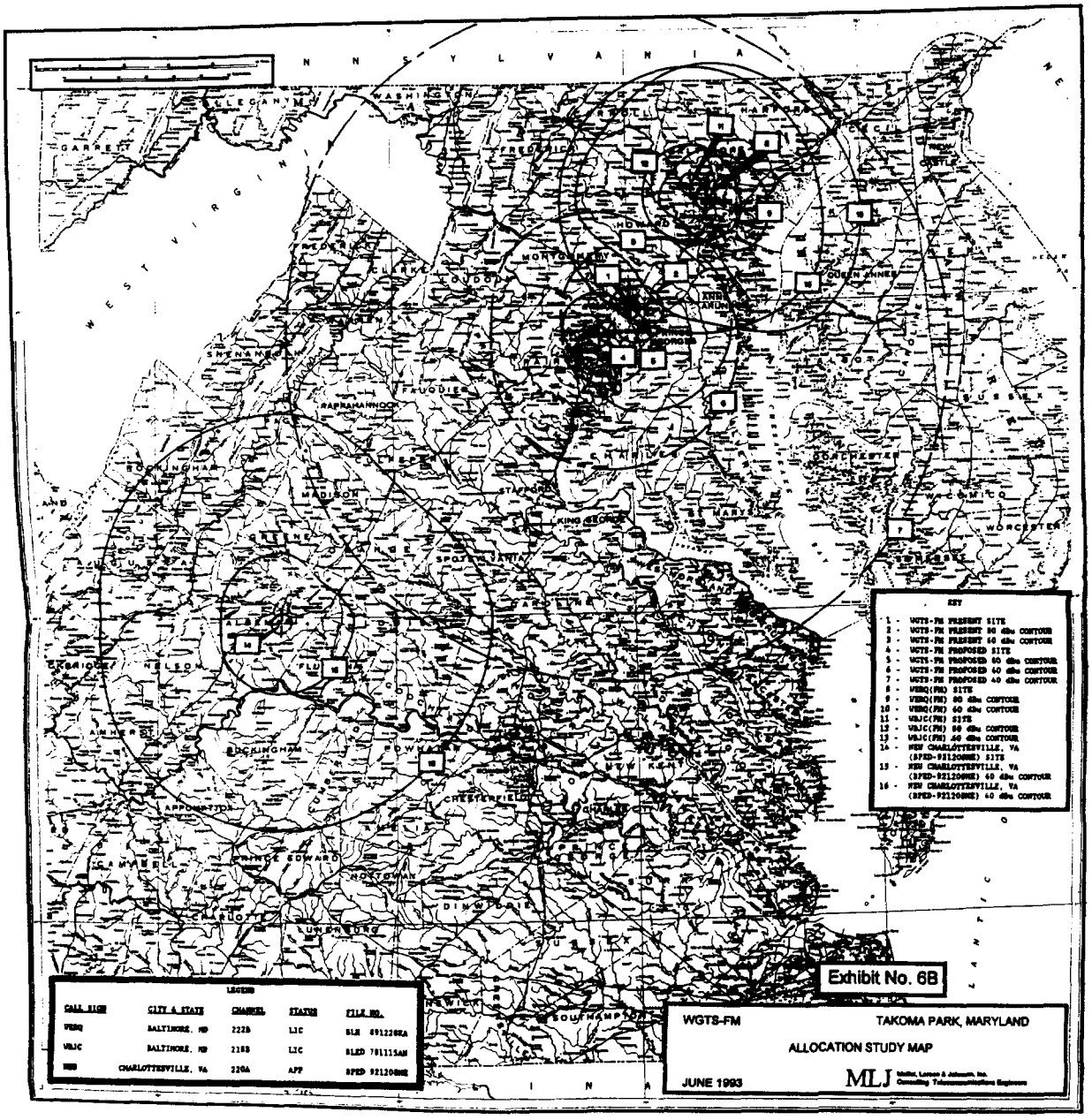
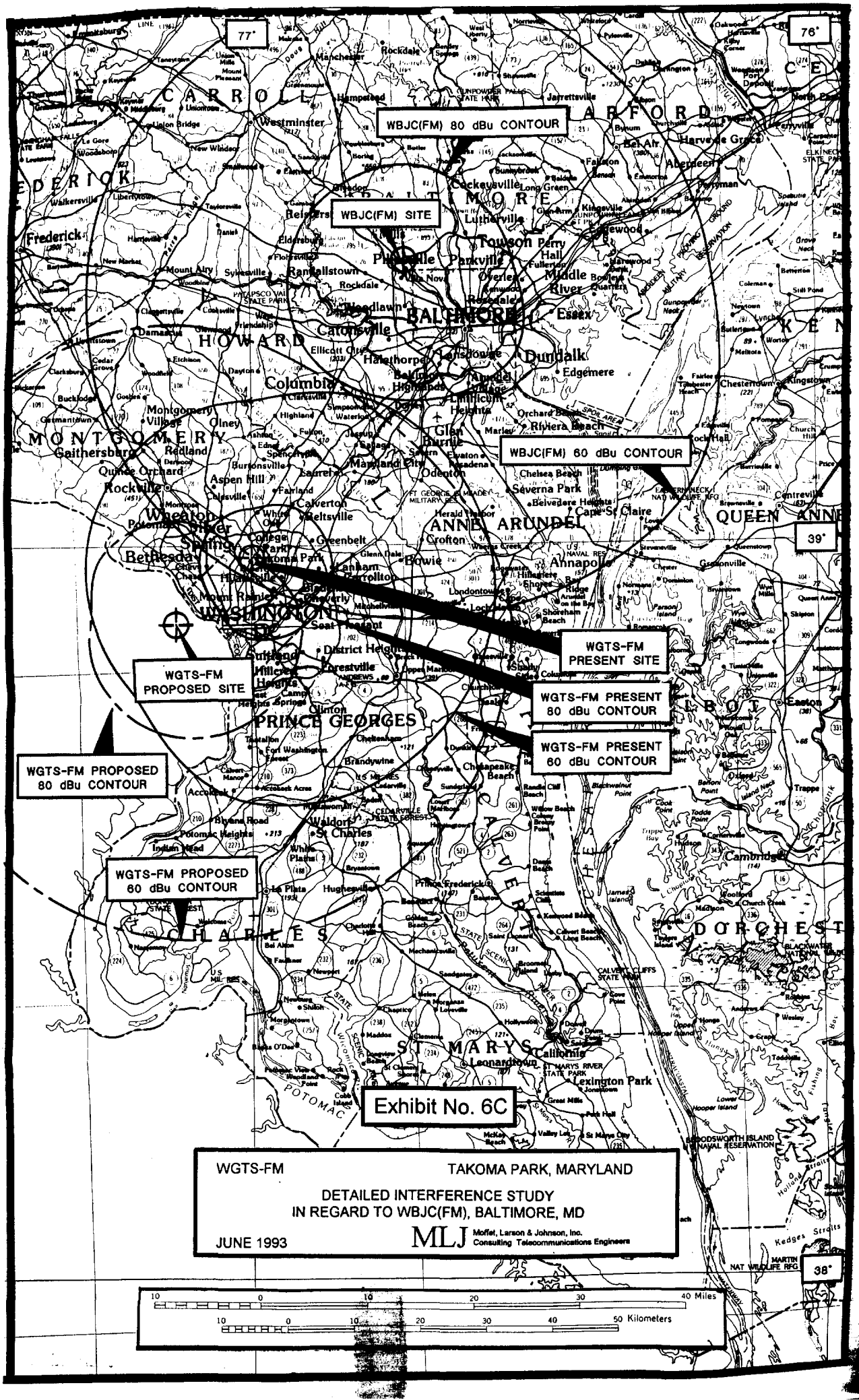

KEY
1 - WGTS-FM PRESENT SITE
2 - WGTS-FM PRESENT 90 dBu CONTOUR
3 - WGTS-FM PRESENT 60 dBu CONTOUR
4 - WGTS-FM PROPOSED SITE
5 - WGTS-FM PROPOSED 90 dBu CONTOUR
6 - WGTS-FM PROPOSED 60 dBu CONTOUR
7 - WGTS-FM PROPOSED 40 dBu CONTOUR
8 - WEBQ(FM) SITE
9 - WEBQ(FM) 90 dBu CONTOUR
10 - WEBQ(FM) 60 dBu CONTOUR
11 - WBJC(FM) SITE
12 - WBJC(FM) 90 dBu CONTOUR
13 - WBJC(FM) 60 dBu CONTOUR
14 - WSN CHARLOTTESVILLE, VA (BPED-921208ME) SITE
15 - WSN CHARLOTTESVILLE, VA (BPED-921208ME) 60 dBu CONTOUR
16 - WSN CHARLOTTESVILLE, VA (BPED-921208ME) 40 dBu CONTOUR
LEGEND
CALL SIGN | CITY & STATE | CHANNEL | STATUS | FILE NO.
WEBQ | BALTIMORE, MD | 222B | LIC | BLH 891226KA
WBJC | BALTIMORE, MD | 218B | LIC | BLED 781115AH
WSN | CHARLOTTESVILLE, VA | 220A | APP | BPED 921208ME
Exhibit No. 6B
WGTS-FM
TAKOMA PARK, MARYLAND
ALLOCATION STUDY MAP
JUNE 1993
MLJ


WBJC(FM) 80 dBu CONTOUR
WBJC(FM) SITE
WBJC(FM) 60 dBu CONTOUR
WGTS-FM PRESENT SITE
WGTS-FM PROPOSED SITE
WGTS-FM PRESENT 80 dBu CONTOUR
WGTS-FM PRESENT 60 dBu CONTOUR
WGTS-FM PROPOSED 80 dBu CONTOUR
WGTS-FM PROPOSED 60 dBu CONTOUR
Exhibit No. 6C
WGTS-FM
TAKOMA PARK, MARYLAND
DETAILED INTERFERENCE STUDY
IN REGARD TO WBJC(FM), BALTIMORE, MD
JUNE 1993
MLJ
Moffet, Larson & Johnson, Inc.
Consulting Telecommunications Engineers
40 Miles
50 Kilometers

Columbia Union College Broadcasting, Inc.
Takoma Park, Maryland
WGTS-FM

EXHIBIT 6-A

FURTHER RESPONSE TO PART 21 OF FCC FORM 340

Table 3 is a channel study of channel 220B from the proposed site. After a detail study of the stations shown on Table 1, it was concluded that the following stations would require further study:

1. WBJC(FM) - Baltimore, Maryland; Channel 218B
2. NEW(FM) - Charlottesville, Virginia (BPED-921208ME); Ch. 220A
3. WERQ(FM) - Baltimore, Maryland; Channel 222B

Attached, as Exhibit 6-B is a map showing the pertinent coverage and interference contours between the stations listed above and the proposed operation. It can be seen on Exhibit 6-B that the proposal will not create interference to, or receive interference from the Charlottesville proposal.

The present operation of WGTS-FM creates 80 dBu contour overlap to WBJC 60 dBu contour as shown on Exhibit 6-B. A detail map showing the overlap condition to WBJC is attached as Exhibit 6-C. The present WGTS-FM overlap area contains 410,847 persons and has an area of 204 square kilometers. The proposed WGTS-FM facility will reduce the overlap area which contains 134,598 persons and has an area of 54 square kilometers. No interference will be received from the WBJC operation. See Exhibit 7-A concerning the FM commercial station WERQ.

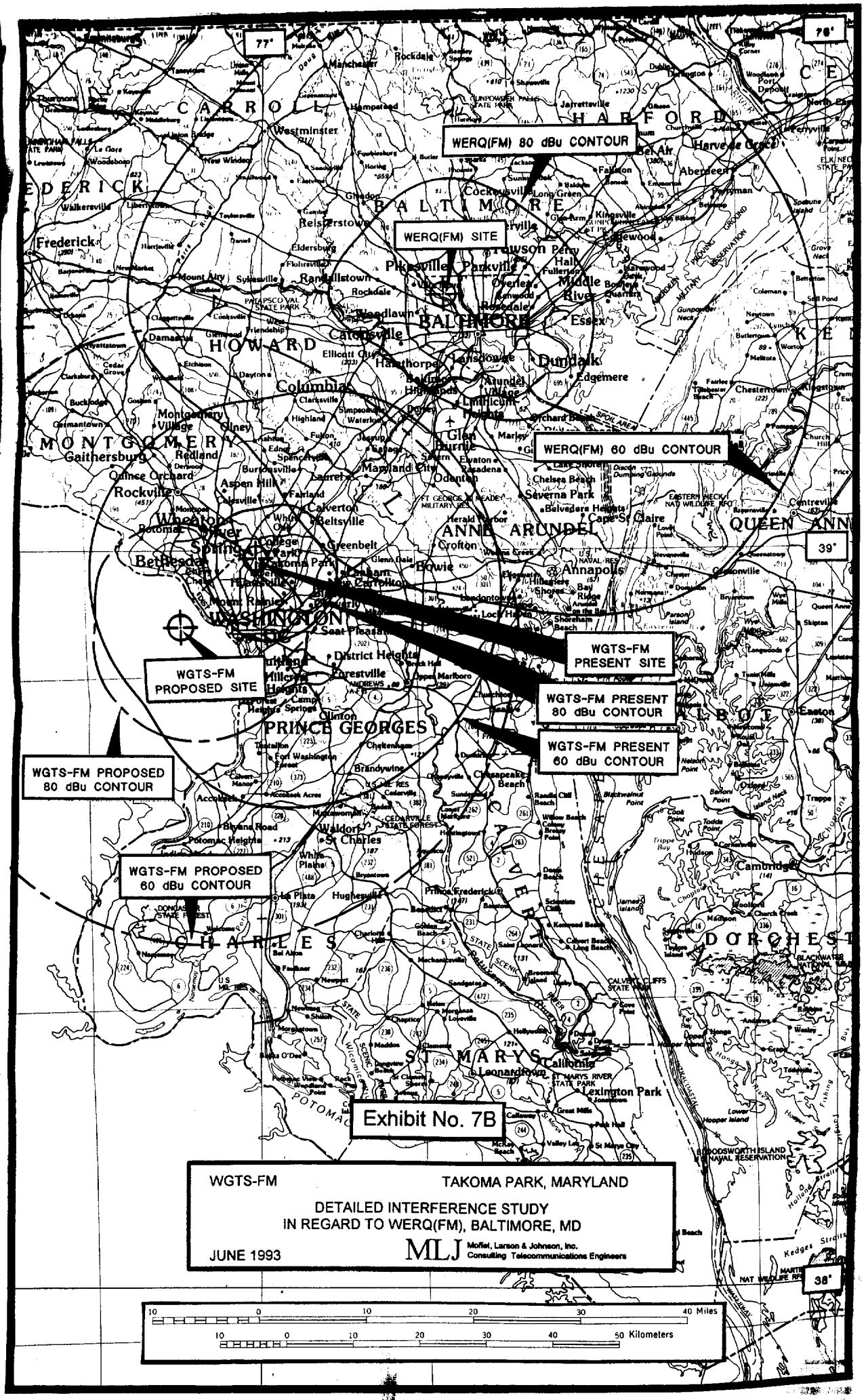
Table 4 is a tabulation of distances for the proposed operation used in constructing Exhibit 6-B. The distances to the other facilities are on file with the FCC.

Moffet, Larson, & Johnson, Inc.

TABLE 3
Date: 6/93

Study Name : PROPOSED WGTS-FM - TAKOMA PARK, MD
Channel : 220B
Coordinates : N 38 53 44.0 W 77 8 4.0
Separations : FM Zone 1 - Educational

Call	City & State	Stat	File - number	Chan	ERP	HAAT	Zn	Latitude	Longitude	Bear	Dist	Req'd	Clear	Notes
											--- kilometers ---			
WTRM	WINCHESTER VA	LIC	BLED 910508KA	*217B1	6.10	1348	1	39 10 59.0	78 23 23.0	286.8	113.27	56.2*	57.11	Comment
WBJC	BALTIMORE MD	LIC	BLED 781115AH	*218B	50.0	497	1	39 23 11.0	76 43 52.0	32.4	64.69	71.9*	-7.24	SHORT
WRTX	DOVER DE	CP	BPED 900116MF	*219A	0.71	279	2	39 11 30.0	75 33 46.0	75.9	139.98	102.2*	37.79	Comment
WMPH	WILMINGTON DE	LIC	BLED 830321AX	*219A	0.10	140	1	39 46 23.0	75 30 25.0	54.6	170.82	102.2*	68.63	
WFWM	FROSTBURG MD	LIC	BLED 890123KA	*219A	0.16	1424	1	39 34 54.0	78 53 53.0	297.2	170.25	102.2*	68.06	
WIXQ	MILLERSVILLE PA	LIC	BLED 810731AE	*219A	0.13	69	1	39 59 53.0	76 21 20.0	28.4	139.56	102.2*	37.37	
WJAZ	SUMMERDALE PA	LIC	BLED 910109KA	*219A	0.14	689	1	40 18 20.0	77 0 27.0	3.9	156.92	102.2*	54.73	
NEW	WEST CHESTER PA	APPM	BPED 920203ME	*219A	0.10	108	1	39 57 2.0	75 35 58.0	47.9	176.61	102.2*	74.41	Comment
NEW	WEST CHESTER PA	APP	BPED 870708	*219A	0.25	103	1	39 56 59.0	75 36 .0	47.9	176.51	102.2*	74.32	
WEMC	HARRISONBURG VA	LIC	BLED 821012AZ	*219A	0.10	205	1	38 28 16.0	78 52 57.0	253.3	159.23	102.2*	57.04	
WEMC	HARRISONBURG VA	CP	BPED 900808MC	*219A	1.84	190	1	38 28 20.0	78 52 57.0	253.3	159.20	102.2*	57.00	
WGTSFM	TAKOMA PARK MD	LIC	BLED 717	*220B	29.5	165	1	38 59 12.0	77 0 4.0	48.7	15.36	189.9*	-174.54	SHORT
NEW	CHARLOTTESVILLE VA	APPM	BPED 921208MEI	*220A	0.40	945	1	37 58 57.0	78 29 .0	229.6	155.38	161.9*	-6.52	SHORT c
NEW	FENWICK ISLAND DE	CP	BPH 850712ZI	221A	3.00	328	1	38 26 15.0	75 8 46.0	105.8	180.37	113.0	67.37	Comment
WVLT	VINELAND NJ	LIC	BLH 900612KA	221A	3.00	328	1	39 29 53.0	75 4 31.0	68.7	190.05	113.0	77.05	Comment
WGLL	MERCERSBURG PA	LIC	BLH 7008	221A	3.30	295	1	39 48 34.0	77 48 22.0	330.6	116.82	113.0	3.82	CLOSE c
WGLL	MERCERSBURG PA	CP	BPH 900305IK	221A	2.70	466	1	39 48 34.0	77 48 22.0	330.6	116.82	113.0	3.82	CLOSE c
WCTX	PALMYRA PA	LIC	BLH 870722KA	221A	3.30	300	1	40 19 35.0	76 36 33.0	15.6	165.14	113.0	52.14	Comment
WDYL	CHESTER VA	LIC	BLH 880520KB	221A	3.00	328	1	37 22 58.0	77 25 41.0	188.8	169.87	113.0	56.87	Comment
WCDX	MECHANICSVILLE VA	CP	BPH 920728IE	221B1	4.56	771	1	37 36 52.0	77 30 56.0	193.3	146.06	145.0	1.06	CLOSE c
WVSY	RUCKERSVILLE VA	LIC	BLH 900404KB	221A	1.40	482	1	38 13 6.0	78 22 3.0	235.3	131.16	113.0	18.16	Comment
WVSY	RUCKERSVILLE VA	CP	BPH 920710ID	221A	6.00	222	1	38 18 5.0	78 31 57.0	241.9	138.51	113.0	25.51	
WERQ	BALTIMORE MD	LIC	BLH 891228KA	222B	37.0	570	1	39 20 20.0	76 40 2.0	39.1	63.68	74.0	-10.32	SHORT
WINCFM	WINCHESTER VA	LIC	BLH 6003	223B	22.0	1430	1	38 57 19.0	78 1 28.0	275.2	77.46	74.0	3.46	CLOSE c
WINC-FM	WINCHESTER VA	CPM	BPH 890206IG	223B	22.2	1424	1	38 57 20.5	78 1 28.0	275.2	77.47	74.0	3.47	CLOSE c
WXYV	BALTIMORE MD	LIC	BLH 890117KE	274B	50.0	437	1	39 23 11.0	76 43 52.0	32.4	64.69	20.0	44.69	


WERQ(FM) 80 dBu CONTOUR
WERQ(FM) SITE
WERQ(FM) 60 dBu CONTOUR
WGTS-FM PRESENT SITE
WGTS-FM PROPOSED SITE
WGTS-FM PRESENT 80 dBu CONTOUR
WGTS-FM PRESENT 60 dBu CONTOUR
WGTS-FM PROPOSED 80 dBu CONTOUR
WGTS-FM PROPOSED 60 dBu CONTOUR
Exhibit No. 7B
WGTS-FM
TAKOMA PARK, MARYLAND
DETAILED INTERFERENCE STUDY
IN REGARD TO WERQ(FM), BALTIMORE, MD
JUNE 1993
MLJ
Moffet, Larson & Johnson, Inc.
Consulting Telecommunications Engineers
40 Miles
50 Kilometers